## **EXISTING CONDITIONS**

This Existing Conditions analysis section is an important first step in the planning process. It serves as a basis or foundation for the development of a network of pedestrian and bicycle improvements that is the one of the end products of this plan.

The section was developed after a review and inventory of existing data and studies that inform current bicycle and pedestrian conditions in St. Tammany Parish.

The section begins with a background and overview of St. Tammany Parish, including its history and development patterns and how this has influenced the current pedestrian and bicycle network. It then includes a summary review of previous and ongoing planning efforts which relate to the St. Tammany Comprehensive Pedestrian and Bicycle Plan. Following that is an examination of existing Bicycle and Pedestrian Safety Conditions (including a review and analysis of bicycle/pedestrian crash incidents within the Parish). A listing and map of existing pedestrian and bicycle facilities within the Parish is then presented. The Existing Conditions section concludes with a summary of current standards and policies for bicycle and pedestrian facilities

# BACKGROUND AND OVERVIEW

St. Tammany Parish has since its founding in 1810 had a strong connection to the larger nearby City of New Orleans. The Parish's two first towns had ties to New Orleans-- Covington (the Parish seat) in addition to being a center of commerce for settlements across the Parish, served as a retreat for New Orleanians with summer homes and hotels, and Madisonville (near the lake) served as the first center for shipping goods (such as lumber and food products) across the lake to New Orleans. Several years later in 1834, the town of Mandeville was developed as a health resort for wealthy New Orleanians, and shortly after that, Abita Springs was similarly founded as a health resort community. Following the development of the first railroad in the Parish (the New Orleans and Northeast Railroad), the town of Slidell along this rail line was incorporated in 1888. A short time later, a spur from this rail line was constructed westward through Mandeville, Abita Springs and Covington, linking these communities (and Slidell) via rail to New Orleans.

St. Tammany Parish, however, remained sparsely populated and almost wholly rural up through the beginning of the auto age. Population growth was centered on the towns mentioned above. With the opening of the US 11 bridge across Lake Pontchartrain and the Highway 90 bridges across Chef Menteur Pass and The Rigolets in the 1930s, the eastern part of the Parish now had a direct highway link to New Orleans. Construction of another key highway bridge, the Lake Pontchartrain Causeway in 1956 (along with its second span in 1969) opened a direct roadway route from the western part of the parish to the south shore. Finally, in 1965 the construction of Interstate 10 and the new twin span bridge across the eastern portion of the Lake provided even quicker high-speed automobile access to the eastern part of the Parish.

With the new high-speed roadway connections to the city center of New Orleans, St. Tammany Parish experienced a large amount of population growth over the following decades as it became an exurb for New Orleans. In 1950, the Parish population was only 26,988 but by 1960, it was 38,643. In 1970, just after the second Causeway span was completed, it had risen to 68,585. By

the turn of the century in 2000, the population had skyrocketed to 191,268, and as of the last decennial census in 2020 the population had grown to 264,570 -- almost ten times what it was in 1950.

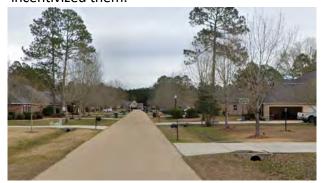
As this growth occurred during the auto age, most infrastructure development in the Parish was auto-oriented. Rural state highways became the Parish's major thoroughfares, but still retained their design to serve only cars and trucks. While the centers of the older towns and cities that were developed in the days of horses and buggies had tighter grid patterns and sidewalks, new subdivisions and neighborhoods built over the last half-century were designed strictly for auto-accessibility: more spread out, almost always without sidewalks, and self-contained without connectivity to one another. It is now difficult, if not impossible, to travel outside of one's neighborhood except via motorized vehicles.



Typical example of current situation on a Parish roadway in St. Tammany Parish-- no bike or pedestrian facilities; pedestrian has to walk in grass alongside roadway

Source: Google Maps Street View, April 2023

The Parish has never mandated the construction of sidewalks in new subdivisions; however it has incentivized them.





Older subdivision without sidewalks (left) newer subdivision with sidewalks (right)
Source: Google Maps Street View, April 2023

Until recently, there has been no requirement or incentive to build sidewalks on Parish roadways or state and US highways. Since 2010, state and US highways are now under the state's *Complete Streets Policy*, which encourages the development of sidewalks and bicycle facilities alongside newly developed or redeveloped roads.

The Parish has attempted to rectify this situation. In the early 1990s, the Parish opened up the first phases of the Tammany Trace, a 31.74-mile long rails-to-trails conversion built primarily for recreational purposes. It now runs from Covington to the outskirts of Slidell via Abita Springs, Mandeville and Lacombe. The Trace is highly used and is being envisioned as "central artery" for future bicycle and pedestrian transport in the Parish.

The Parish's New Directions 2040 Plan was adopted in 2022, and provided several mobility strategies, from incentives for bicycle and pedestrian accommodations in new development to retrofitting existing roadways so that people can walk and bike safely to their destination, or to existing/adjacent networks.

The Parish is currently finalizing a Parish-Wide Multi-Modal Transportation Plan. The primary objective of this plan is to define a comprehensive transportation program that promptly addresses roadway capacity needs and strategic investments in alternative transportation. In the context of this plan, 'alternative transportation' refers specifically to non-motorized modes of mobility, namely walking or bicycling.

Finally, this Comprehensive Pedestrian and Bicycle Master Plan is being undertaken to formulate a useful, hierarchical and interconnected network plan of on-street and off-street bicycle and pedestrian facilities, as well as recommendations on zoning and policy changes the Parish may wish to undertake (including a Parish-wide Complete Streets Policy) to improve bicycle and pedestrian access throughout the unincorporated portions of the parish.

## REVIEW OF PREVIOUS AND ONGOING PLANNING EFFORTS

Over the past twenty years there have been numerous bicycle/pedestrian planning efforts in the area. There have been several bicycle and pedestrian plans completed for municipalities within the Parish, as well as transportation corridor analyses, local, regional and state plans, maps, and policies that have been adopted.

Following is a list of these efforts in chronological order, along with a summary of each.

## Greater New Orleans Area Bike Map (LADOTD) – 2005

This bicycle route map covered Orleans, Jefferson, St. Bernard, St. Tammany and Tangipahoa parishes in southeast Louisiana. Its focus was on state-owned/maintained roadways, and how each was suitable for bicycle travel, with color indicators for roads with low, moderate and high

traffic, as well as outline indicators for highways with paved shoulders 4' or wider. The map also indicated in red those roadways which are not recommended for bicycle use, as well as interstate highways where pedestrian and bicycle travel is not allowed. Finally, the map has indicators for which highways are suggested for part of a cross-state bicycle route. The map will assist this planning effort in creating a portion of the Parish-Wide bicycle network on existing state highways.



Source: Greater New Orleans Bicycle Map, 2005

<u>LINK</u>:http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Multimodal/Data\_Collection/ Mapping/Bicycle%20Map/Bicycle%20Trails%20-%20Greater%20New%20Orleans.pdf

## New Orleans Metropolitan Bicycle and Pedestrian Plan – 2006

To help improve walking and biking conditions in the New Orleans region, the Regional Planning Commission undertook its first-ever Regional Bicycle and Pedestrian Master Plan. The Plan surveyed existing conditions for bicyclists and pedestrians. An overview of the best practices in pedestrian and bicycling planning was conducted for the Plan, which provided a clear framework for evaluating future policies. The third task of the Master Plan was to put this knowledge base of appropriate policies to practical work in examining the existing policy programs in place to



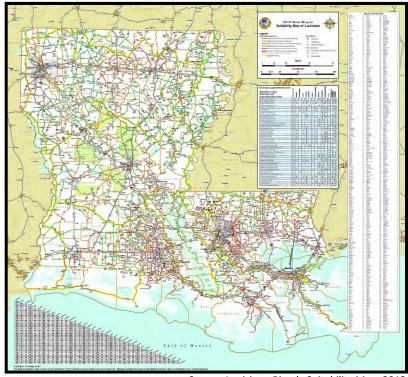
address bicycling and walking in the region. A series of bicycle networks was also presented for the region, using both shared use paths as well as existing surface roadways (primarily yield roadways and paved shoulders). However, these networks were only presented for the south shore of Lake Pontchartrain. Finally, the Master Plan addressed the desired direction of future policy initiatives. This early region-wide effort lays the groundwork for this planning effort, particularly in terms of policies and programs.

Source: New Orleans Metropolitan Bicycle and Pedestrian Plan, 2006

## Louisiana Bicycle Suitability Map - 2012

This map built upon the Greater New Orleans Bike Map five years earlier and included the entire

Its focus was also on state-owned maintained roadways, and how each is suitable for bicycle travel, with color indicators for roads with high moderate and low ease of use, further divided into two lane highways and four or more lane highways. The map also has indicators for highways that are suggested for cross-state bicycle routes. Unlike the previous map, this map also mapped critical links in urban areas, which were defined as roadways non-state and highways that are preferred routes for cyclists in urban areas.



Source: Louisiana Bicycle Suitability Map, 2012

<u>LINK:</u> http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Multimodal/Data\_Collection/Mapping/Bicycle%20Map/Louisiana%20Bicycle%20Suitability%20Map%20%E2%80%93%202012%20(side%202).pdf

On its opposite side, the 2012 map also included shared use trails in urbanized areas (such as the Tammany Trace) that are not on the state highway system but heavily used by bicyclists. Like the Greater New Orleans Area Bike Map, this map will assist this planning effort in creating a portion of the Parish-wide bicycle network on existing state highways.



Close-up of St. Tammany Parish portion of the map (left) and map of Tammany Trace (right) from the map

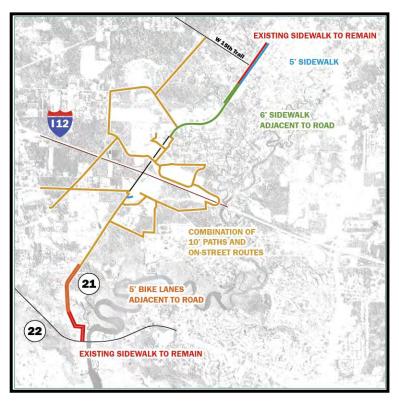
Source: Louisiana Bicycle Suitability Map, 2012

<u>LINK</u>: http://wwwsp.dotd.la.gov/Inside\_LaDOTD/Divisions/Multimodal/Data\_Collection/Mapping/Bicycle%20Map/Louisiana%20Bicycle%20Suitability%20Map%20%E2%80%93%202012%20(side%202).pdf

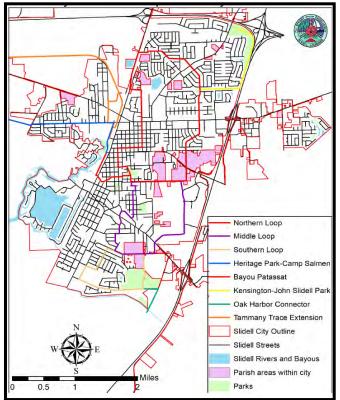
## LA 21: US 190/Covington to LA 22/Madisonville Bicycle and Pedestrian Improvements - 2013

This was a Feasibility Study for bicycle & pedestrian improvements along and adjacent to LA 21

from US 190 to LA 22 within St. Tammany Parish. Large scale residential development on large lots as well as retail and commercial development along LA 21 from US 190 to LA 22 have resulted in an increased amount of traffic. study investigated enhancements to bicycle and pedestrian mobility and safety as well as reducing congestion and improving quality. The final product included a network of identifiable bike paths and routes to begin to link neighborhoods to LA 21 and community nodes in strategic locations and intersections. This network planned will be incorporated into the network developed under this planning effort.



Source: LA 21: US 190/Covington to LA 22/Madisonville Bicycle and Pedestrian Study, 2013



# City of Slidell Bicycle Master Plan - 2014, amended 2020

The purpose of the City of Slidell's Bicycle Master Plan was to provide a network plan of interconnected bicycle and pedestrian facilities that would provide a safe, reliable means of transportation and recreation for the city's residents and visitors. Using this network plan, the City could then identify, prioritize, design, fund, and construct individual projects. This plan will be useful in this planning effort to determine connectivity between the City of Slidell bicycle network and the new network for unincorporated St. Tammany Parish.

Source: City of Slidell Bicycle Master Plan, 2014 amended

2020 LINK: https://myslidell.com/wp-content/uploads/2021/03/Bicycle-Master-Plan 20201208.pdf

# Environmental Assessment for US 190 (Collins Boulevard) Widening (Louisiana Highway 25 to US 190 Business) – 2017

This NEPA document completed under the auspices of the RPC and the LADOTD examines the design alternatives and environmental impacts of a new highway widening project in the heart of St. Tammany Parish. Unlike previous highway improvements, this project is a newer example that addressed the *LADOTD Complete Streets Policy* and took into consideration pedestrian and bicycle movements. As part of the design, a paved, 10-foot-wide side path would be constructed along both sides of the project corridor to provide pedestrian and bicycle access to businesses and residences along the project corridor. The project also impacts the Tammany Trace (envisioned as a key part of the bicycle/pedestrian network to be developed under this planning effort) and includes a realignment of the Trace and construction of a tunnel to replace a current at-grade crossing.

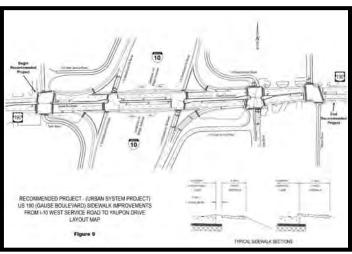


<u>Plan view of a portion of improved US 90 showing side paths on both sides of the roadway</u>
Source: Environmental Assessment for US 190 (Collins Blvd) Widening (LA Hwy 25 to US 190 Business, 2017

# US 190 (Gause Boulevard) Sidewalk Stage 0 Study - 2017

Both the City of Slidell and St. Tammany Parish wished to provide pedestrians safe and continuous sidewalks along US 190 (Gause Boulevard) that meet current LADOTD standards and ADA requirements. This Stage 0 sidewalk study represents the second phase in a multi-phase study to examine existing sidewalk conditions and connectivity along the entire route. The Phase

2 study section encompasses the highvolume I-10 @ US 190 (Gause Boulevard) interchange, from just east of Lindberg Drive/ Kensington Boulevard intersection and extending east to Frederick Drive. The study included conceptual engineering design for new sidewalks and crosswalks in the interchange area to better serve pedestrian needs. This can serve as a guide for similar recommendations at interstate highway interchanges areas in the Parish.

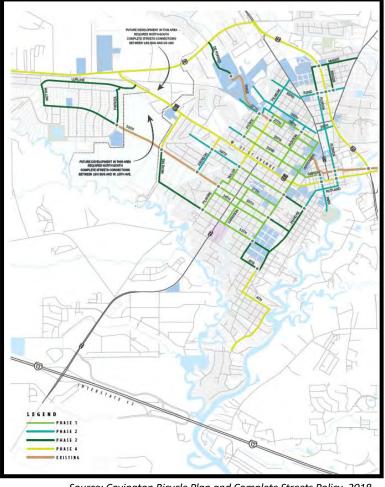


Source: US 190 (Gause Boulevard) Sidewalk Stage 0 Study,2017 <u>LINK:</u> https://www.norpc.org/wp-content/uploads/2020/06/US-190-Gause-Boulevard-Sidewalk-Study-June-2017\_Full-Document.pdf

## Covington Bicycle Plan and Complete Streets Policy - 2018

This document included a Bicycle Plan Feasibility Study, a city-wide Complete Streets Policy as

well as a Stage 0 Environmental Checklist and a Stage O Preliminary Scope and Budget Checklist for short and long-term recommendations. Short and long-term comprehensive conceptual designs were developed for the study area including plan typical sections, layouts, visual control traffic renderings, and calming features, and bicycle and pedestrian improvements. The purpose of the plan was to link neighborhoods with downtown Covington, schools, parks, commercial centers, and other public facilities. The plan is a helpful to this planning effort as a similar example on a smaller scale, and while the geographic boundaries of the scope were the Covington city limits, there was also an emphasis placed on potential bicycle routes which can be incorporated into a regional or locally significant travel network.



Source: Covington Bicycle Plan and Complete Streets Policy, 2018 LINK:https://static1.squarespace.com/static/5d274deecaf7a20001067d76/t/ 5d559e959d2de000011a1890/1565892285759/Covington+Bicycle+Plan\_reduced.pdf

## Madisonville Pedestrian and Bicycle Master Plan Feasibility Study – 2019

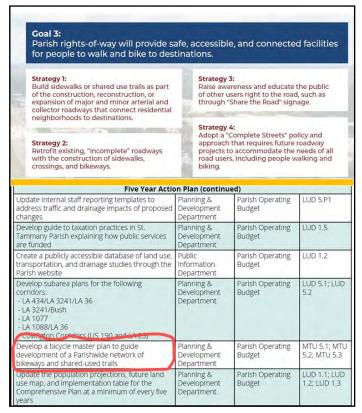
The purpose of this Stage 0 Study was to evaluate and provide solutions for improved mobility and safety for people walking and biking within and connecting to the City of Madisonville. As a Stage 0 study, the report identified and provided a cost estimate for defined capital improvements, and included a draft Complete Streets Policy for the City of Madisonville to guide



current and future plans and projects affecting the public right-of-way. Like the Covington plan, this plan is also pertinent to this planning effort as a similar example on a smaller scale and via its planned improvements, which can inform and link to St. Tammany Parish improvements outside the city limits and create an effective Parishwide network.

Source: Madisonville Pedestrian and Bicycle Master Plan Feasibility Study, 2019
LINK: https://townofmadisonville.org/wp-content/uploads/2024/07/Revised-Report Final.pdf

## New Directions 2040 - The St. Tammany Parish Comprehensive Plan - 2022



The New Directions 2040 Plan was adopted in 2022, and provided several mobility strategies, from incentives for bicycle/pedestrian accommodations in new development to retrofitting existing roadways as complete streets. Via such measures, people can walk and bike safely to their destination, or to existing/adjacent networks. This St. Tammany Parish Comprehensive Pedestrian and Bicycle Master Plan is being developed in response to the 2040 New Directions Plan directives.

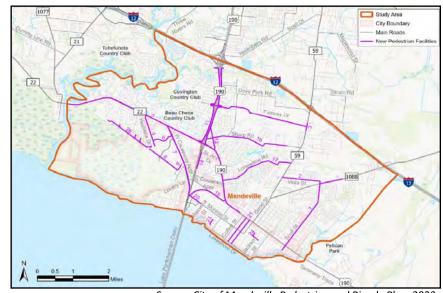
Source: New Directions 2040 - The St. Tammany Parish Comprehensive Plan - 2022

LINK: https://www3.stpgov.org/pdf/ND2040 Comprehensive Plan.pdf

## City of Mandeville Pedestrian and Bicycle Plan - 2023

This plan was an update to an earlier plan created in 2007 with some sections updated in 2012, as some recommendations from the previous plan had already been implemented, others were under construction, and some recommendations were no longer applicable due to

changes in land use and traffic conditions.



Source: City of Mandeville Pedestrian and Bicycle Plan, 2023

<u>LINK</u>: https://www.cityofmandeville.com/sites/default/files/fileattachments/
planning and development/page/2489/city of mandeville pedestrian and bicycle plan.pdf

The purpose of this plan was to serve as a guide to implementing a successful pedestrian and bicyclist program, focusing on the needs of the community, and focused on increasing mobility, connectivity, and improving safety and quality of life for active transportation users in the City of Mandeville. Major components of the plan included development of a safe non-motorized network that connects people with major facilities and destinations, development of recommendations for improvements to existing facilities that would enhance connectivity and accessibility to all residents within the City of Mandeville and St. Tammany Parish, and development of a Complete Streets Policy for the City of Mandeville. Like the previous two city pedestrian/bicycle plans, this plan is also pertinent as a similar example on a smaller scale and its intention to reach out and connect to future St. Tammany Parish improvements to create an effective Parish-wide network.

#### Olde Towne Slidell Master Plan - 2023

The purpose of this master plan was to provide the City of Slidell with a blueprint to further



revitalize its quaint and historic "Olde Towne" area, which remains a cherished focal point for the community. One of its goals is to accommodate non-motorized users such as pedestrians and cyclists through the addition of bike facilities and improved pedestrian crossings, particularly along Front Street. This plan interacts with this planning effort in several ways: (1) its proposal to connect Olde Towne to an extended Tammany Trace at Heritage Park (2) its proposal to rebuild Fremaux Avenue a "complete street," (3) its proposal to extend bike lanes can down Bayou Lane to Heritage Park: and, (4) its proposal for Olde Towne's smaller "local" streets to function as yield roadways in which cyclists would share the road with vehicles.

Source: Olde Towne Slidell Master Plan, 2023

LINK: https://myslidell.com/wp-content/uploads/2023/01/Olde-Towne-Master-Plan-Final-1.21.23-1.pdf

# Abita Springs Master Plan - February 2024

This master plan is a comprehensive master plan containing elements such as land use, community design and preservation, natural resources and resilience, economic development, and mobility. Under this element two issues of community concern were (1) walkability and pedestrian safety (including walkable safe routes to school) and (2) increased bicycle

infrastructure. The plan includes a list of goals, strategies and policies to address these issues, as well as proposed standards for new facilities and maps of suggested improvements which would branch off the Tammany Trace which runs through the town.

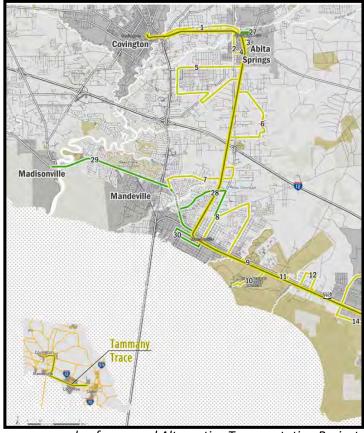


Source: Abita Springs Master Plan - February 2024

LINK: https://www.townofabitasprings.com/\_files/ugd/509006\_e5dadfd712724dbfbc35377b8c8043ea.pdf

# St. Tammany Parish Multi-Modal Transportation Plan (draft) - August 2024

Currently being finalized is a Parish-Wide Multi-Modal Transportation Plan. The primary objective of this plan is to define a comprehensive transportation program that promptly addresses roadway capacity needs and strategic investments in alternative transportation. In the context of this plan, 'alternative transportation' refers specifically to non-motorized modes of mobility, namely walking or bicycling. Additionally, it builds upon the transportation element and aligns with the goals and objectives established in the New Directions 2040 Plan. also of the completes one implementation actions established in the New Directions 2040 Plan.



One map example of proposed Alternative Transportation Projects Source: St. Tammany Parish Multi-Modal Transportation Plan (draft) - August 2024

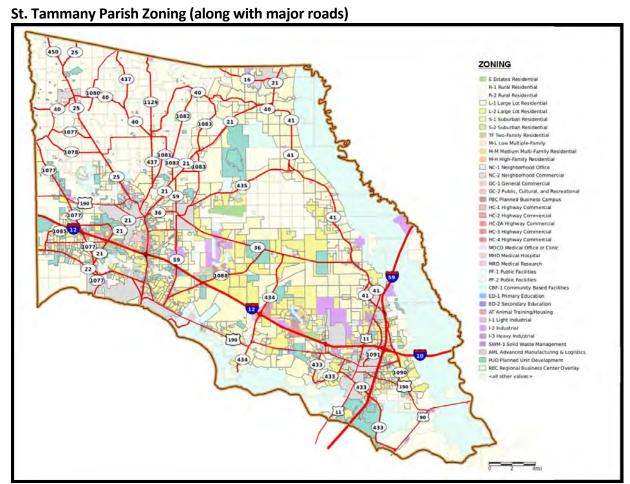
<u>LINK</u>: https://csrsinc-my.sharepoint.com/personal/onam\_bisht\_csrsinc\_com/\_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fonam %5Fbisht%5Fcsrsinc%5Fcom%2FDocuments%2F222036%20STP%20MMTP%2F9%2E24%2E24%5FSTP%20MMTP%5Fdraft%20%28 print%20version%29%2Epdf&parent=%2Fpersonal%2Fonam%5Fbisht%5Fcsrsinc%5Fcom%2FDocuments%2F222036%20STP%20M MTP&ga=1

One of the key features of this plan which will interact with this planning effort is the section on alternative transportation. Under the *Multi-Modal Plan*, numerous projects were envisioned, mapped, listed, and had cost estimates prepared for them. These projects, having gone through the public engagement process, will certainly be included as an initial round of new projects for the St. Tammany Pedestrian and Bicycle Plan.

## St. Tammany Parish GIS Maps

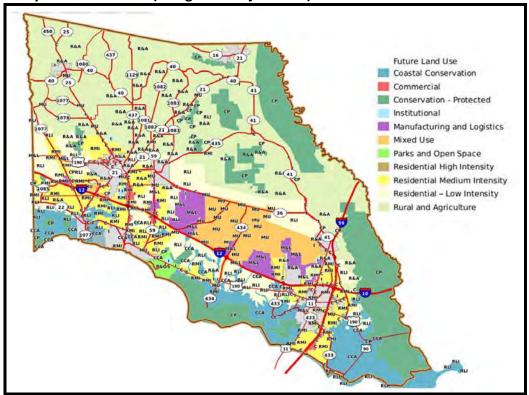
The Parish maintains a Geographic Information Systems (GIS) database from existing public records that the Parish maintains to carry out the normal functions of the St. Tammany Parish Government. St, Tammany Parish Government customarily uses this data for planning purposes and record keeping. Much of the GIS maps and data are able to be accessed via the Parish's Geoportal online map viewer. Pertinent maps and data which are being used in the Comprehensive Bicycle and Pedestrian Plan include maps illustrating zoning, future land use, parish-maintained roadways (separate from state highways and city roads), and parcel maps, which will be useful in this planning effort for quickly and easily estimating right-of-way dimensions.

These maps are shown below:



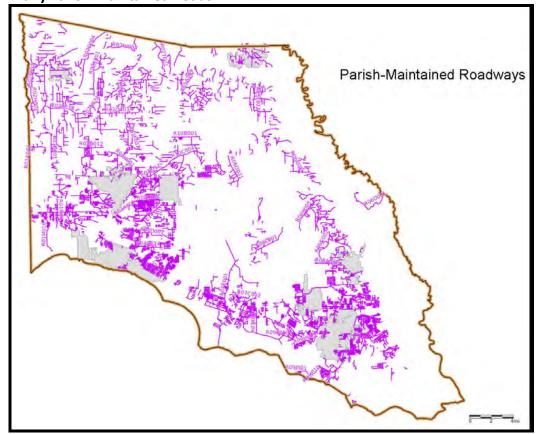
Source: St. Tammany Parish Geoportal online map viewer

# St. Tammany Future Land Use (along with major roads)



Source: St. Tammany Parish Geoportal online map viewer

# St. Tammany Parish-Maintained Roads



Source: St. Tammany Parish Geoportal online map viewer

St. Tammany Parish Parcel Maps (close-up example)



Source: St. Tammany Parish Geoportal online map viewer

## EXISTING BICYCLE AND PEDESTRIAN SAFETY CONDITIONS

#### Introduction

The crash history in unincorporated St. Tammany Parish was reviewed to identify the factors that may contribute to crashes involving bicyclists and pedestrians. This information can be included in the plan to improve safety for cyclists and pedestrians by modifying existing infrastructure and/or designing new infrastructure with countermeasures to the contributing factors. The evaluation of crash history involving bicyclists and/or pedestrians had an emphasis on those crashes resulting in fatalities and/or injuries. The results will be used when developing the proposed plan to provide safe routes for cyclists and pedestrians in unincorporated St. Tammany Parish.

# Methodology

LADOTD's center for analytics and research in transportation (LA CART) was utilized to obtain reported crash data in St. Tammany during the five (5) year span of 2018 to 2022. The crash data was divided into two (2) sets, those involving bicycles and those involving pedestrians. The crash data was further reduced to only include those in unincorporated St. Tammany that were reported to have resulted in fatalities and/or injuries (i.e., suspected serious, suspected minor, and/or possible injuries).

Crash maps were created to depict locations of the reported crashes. The red dots represent a "Suspected Serious injury", and the dark grey dots represent a "Fatal Injury".

This data was used to calculate the various factors that may have contributed to the crashes and included the following:

- Crash Location
- Roadway Types
- Alcohol Involvement
- Crashes Each Year
- Driver Awareness
- Driver Age
- Manner of Collision
- Environmental Conditions

## **Existing Conditions Results**

The five (5) years of crash history in St. Tammany Parish included one hundred-seven (107) crashes involving a bicycle and one hundred eighty-eight (188) involving a pedestrian; one (1) crash involved both.

Crash & Safety Data Statement: This document and the information contained herein is prepared solely for the purposes of identifying, evaluating and panning safety improvements on public roads which may be implemented utilizing federal aid highway funds; and is therefore exempt from discovery or admission into evidence pursuant to 23 U.S.C.407. Contact the LADOTD Traffic Safety Office at (225) 379-1871 before releasing any information.

## **Bicycle Crashes**

The different locations of the 107 bicycle crashes reported in St. Tammany Parish are presented in Figure 1.

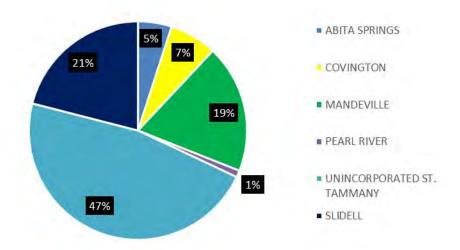


Figure 1: Bicycle Crash Locations, 2018-2022

(source: LA CART)

Of the 107 bicycle crashes, fifty (50) were reported to be in unincorporated St. Tammany. **Figure 2** provides a breakdown of the severity of the reported bicycle crashes that occurred in unincorporated St. Tammany. Of the fifty (50) bicycle crashes, forty-six (46) involved fatalities and/or injuries. This included four (4) fatal crashes, five (5) crashes involving serious injuries, twenty-two (22) with minor injuries, and fifteen (15) with possible injury.

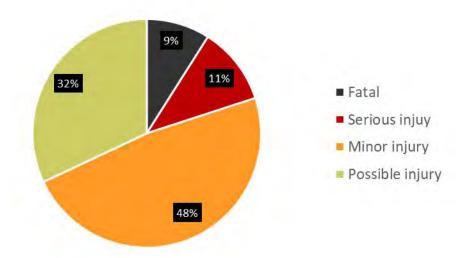


Figure 2: Bicycle Crash Severity in Unincorporated St. Tammany, 2018-2022 (SOURCE: LA CART)

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The forty-six (46) bicycle crashes involving fatalities and/or injuries identified in unincorporated St. Tammany were broken down by the five (5) year span and presented in **Figure 3**. The year 2019 reported the highest number (12 crashes), but the difference in number of crashes in each year only varied between 1 and 7.

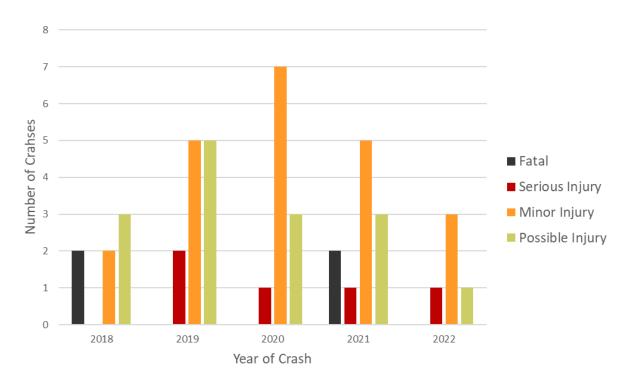


Figure 3: Bicycle Fatalities and Severe Injuries Each Year, 2018-2022 (source: LA CART)

Of the forty-six (46) fatal and injury bicycle crashes located in unincorporated St. Tammany, twelve (12) were reported along a US highway, fourteen (14) on a state highway, and twenty (20) on a parish road, as presented in **Figure 4**. This suggests that further evaluation of the bicycle facilities on parish roads may be warranted to identify any contributing factors.

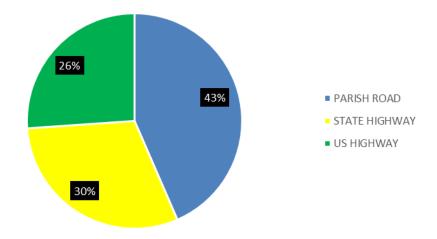


Figure 4: Roadway Types with Bicycle Crashes, 2018-2022 (source: LA CART)

Of the forty-six (46) reported bicycle crashes involving fatalities and/or injuries identified in the crash data, eight (8) were identified as rear-end, eight (8) were sideswipe, twenty-two (22) were angle, two (2) were head-on, and six (6) were "other" crash types. The manner of collision can be identified as a contributing factor due to the number of bicyclists being angle collision, as presented in **Figure 5**. This can be due to the unavailability of bicycle passages to use to avoid motorists.

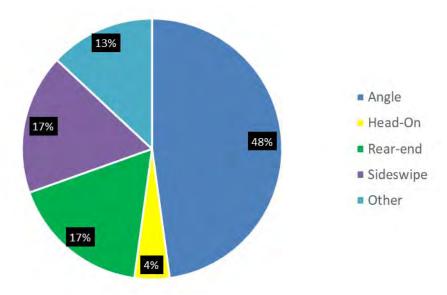


Figure 5: Manner of Collision of Bicycle Crashes, 2018-2022 (source: LA CART)

Seven (7) of the forty-six (46) crashes were reported to have involved alcohol, which could be considered a contributing factor but does not suggest needed infrastructure countermeasures.

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Instead, behavior countermeasures may be needed, which are beyond the scope of this project. Thirty (30) of the drivers in the 46 crashes were reported as inattentive. Signage and striping can be installed as a countermeasure to warn drivers to pay attention to bicyclists.

Of the forty-six (46) crashes, nine (9) were reported as occurring when it was dark – not lighted, four (4) as dark – streetlights at intersections only, one (1) as dark- continuous streetlights, three (3) at Dawn/Dusk, and twenty-nine (29) during daylight as shown in **Figure 6**. Although many of the crashes occurred during daylight, countermeasures to enhance visibility without lighting should be considered.

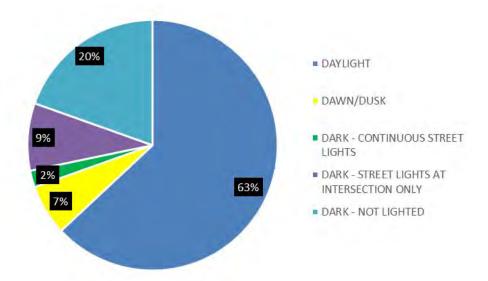


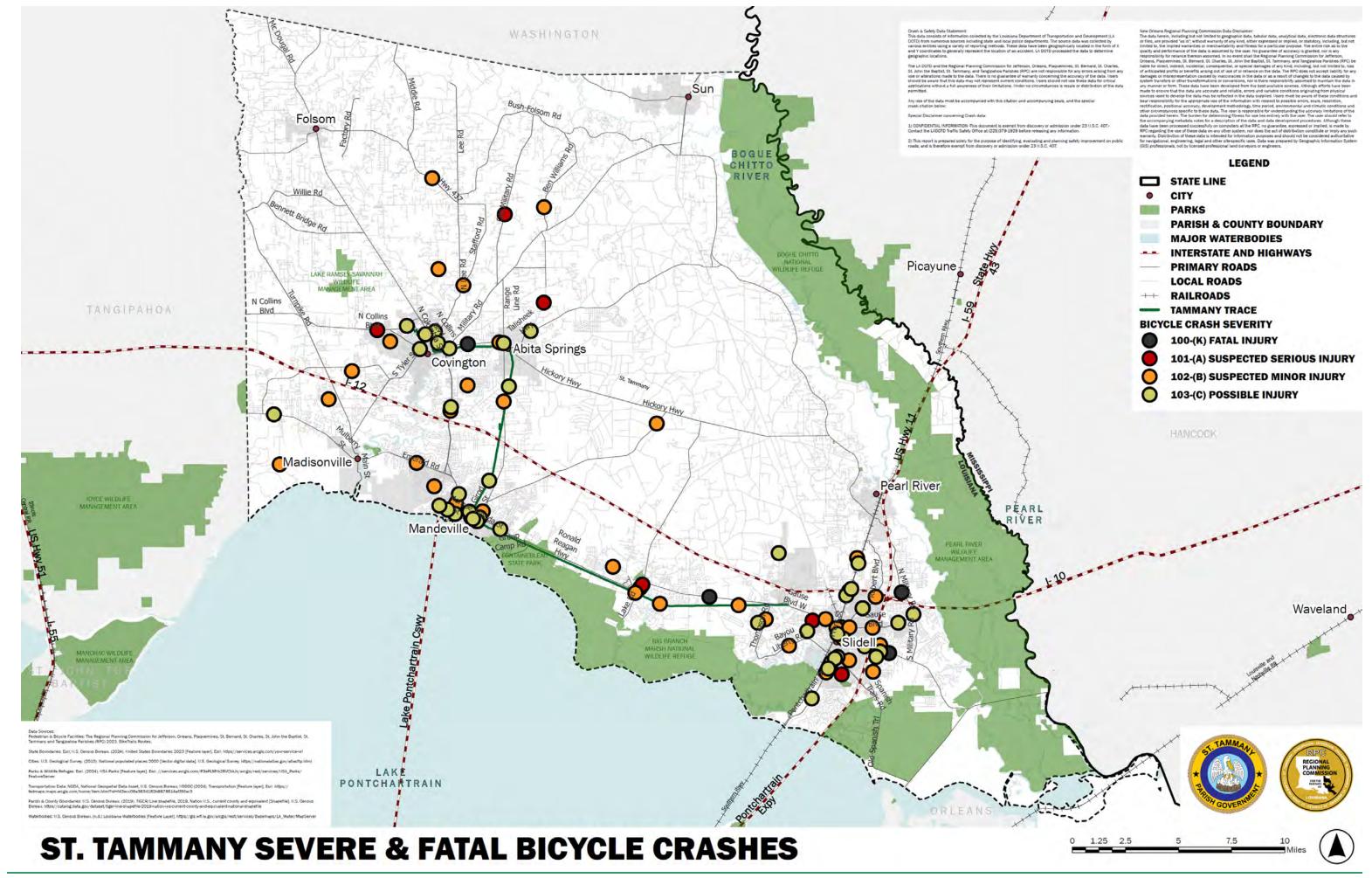
Figure 6: Bicycle Lighting Condition for Crashes, 2018-2022 (source: LA CART)

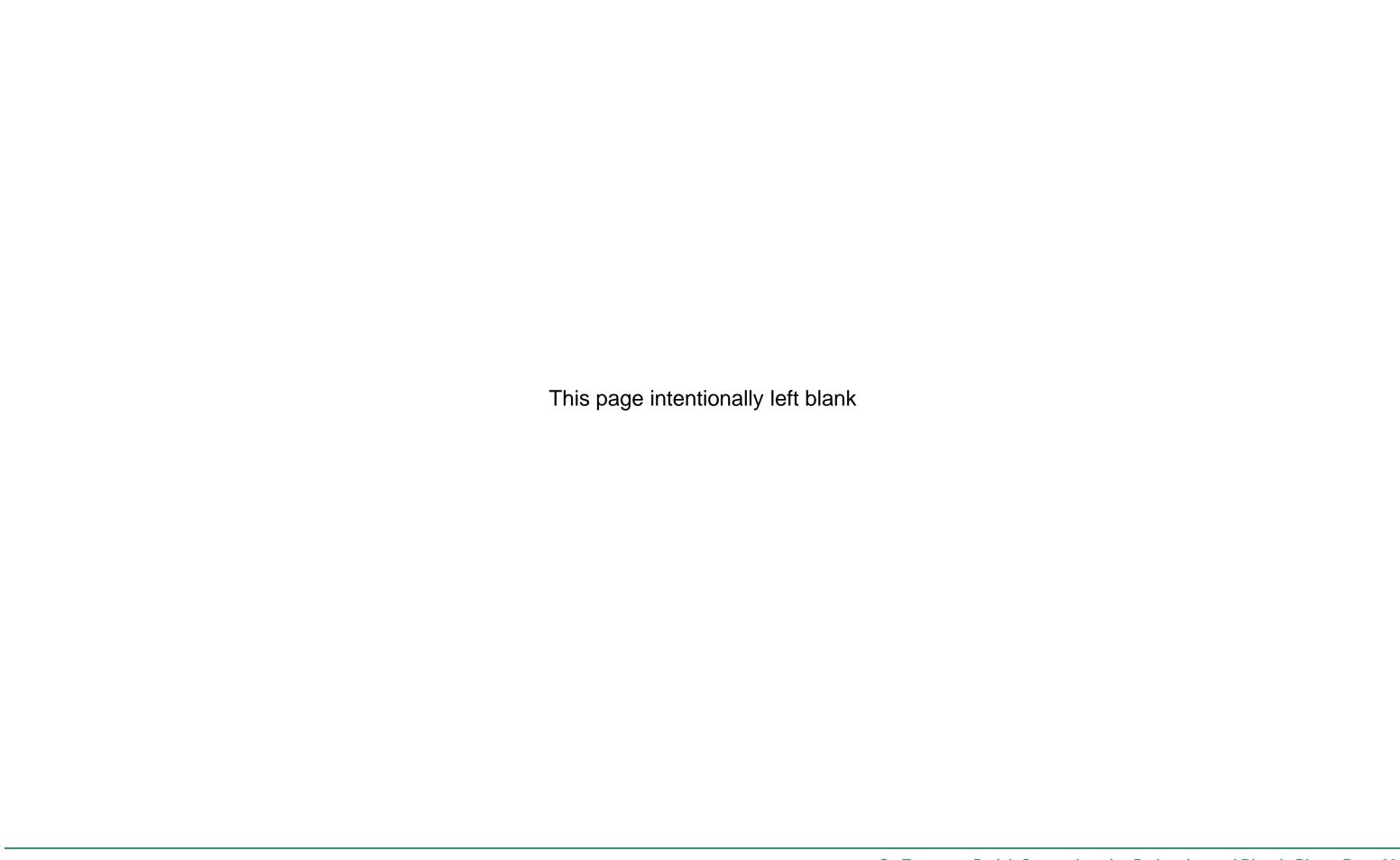
The Bicycle Crash Map, showing the location of crashes as well as severity, is presented on the following page. One (1) hot-spot was identified in unincorporated St Tammany, where two bicycle crashes involving serious injury occurred on US 190; one occurred at the LA 434 roundabout, and the other occurred midblock, between the roundabout and Davis Ave/Lake Rd. Additional hot spots, outside of the study area, were identified:

- In Slidell, four (4) bicycle crashes occurred on the Pontchartrain Dr corridor, between Old Spanish Trail and Sun Valley Dr.
- In Covington, four (4) bicycle crashes occurred on Carroll St near the Tammany Trace Bike
   Trail

Crash & Safety Data Statement: This document and the information contained herein is prepared solely for the purposes of identifying, evaluating and panning safety improvements on public roads which may be implemented utilizing federal aid highway funds; and is therefore exempt from discovery or admission into evidence pursuant to 23 U.S.C.407. Contact the LADOTD Traffic Safety Office at (225) 379-1871 before releasing any information.







## **Pedestrian Crashes**

The different locations of the one hundred eighty-eight (188) pedestrian crashes reported in St. Tammany Parish are presented in **Figure 7**.

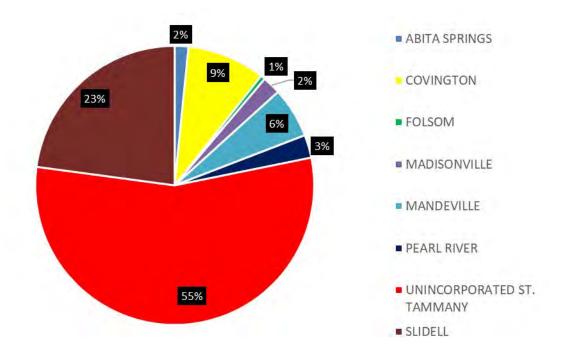


Figure 7: Pedestrian Crash Locations, 2018-2022 (source: LA CART)

Of the 188 pedestrian crashes, one hundred-four (104) were reported in unincorporated St. Tammany. **Figure 8** provides a breakdown of the severity of the reported pedestrian crashes. Of the 104 pedestrian crashes, eighty-nine (89) involved fatalities and/or injuries. This included seventeen (17) fatal crashes, eight (8) crashes involving serious injuries, thirty-five (35) with minor injuries, and twenty-nine (29) with possible injury.

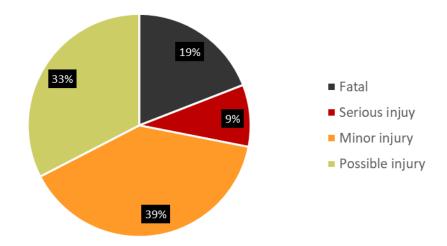


Figure 8: Pedestrian Crash Severity in Unincorporated St. Tammany, 2018-2022 (Source: LA CART)

The eighty-nine (89) pedestrian crashes involving fatalities and/or injuries identified in unincorporated St. Tammany were broken down by the five (5) year span and presented in **Figure 9**. The years 2018 and 2022 reported the highest number (21 crashes), Year 2021 had the fewest number reported (11 crashes). The difference in number of crashes in each year varied between 11 and 21.

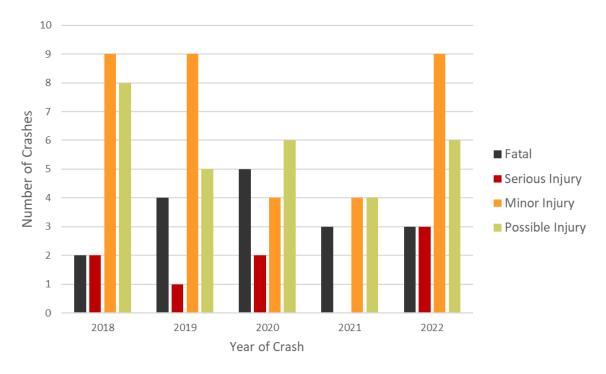


Figure 9: Pedestrian Fatalities and Severe Injuries Each Year (source: LA CART)

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Of the eighty-nine (89) fatal and injury pedestrian crashes in unincorporated St. Tammany, sixteen (16) were reported along an interstate, fourteen (14) on a US highway, twenty-two (22) on a state highway, thirty-seven (37) on a parish road, as presented in **Figure 10**. This suggests that further evaluation of the pedestrian facilities on parish roads may be warranted to identify any contributing factors.

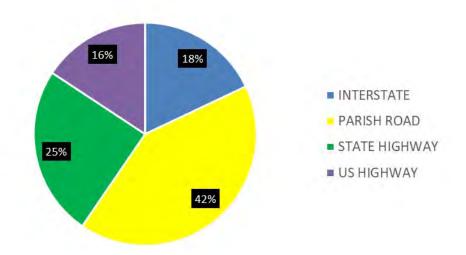


Figure 10: Roadway Types with Pedestrian Crashes, 2018-2022 (source: LA CART)

Of the eighty-nine (89) reported pedestrian crashes involving fatalities and/or injuries identified in the crash data, five (5) were identified as rear-end, four (4) were sideswipe, one (1) was angle, two (2) were head-on, and seventy-seven (77) were "other" crash types. This does not indicate that there was a contributing factor present from the manner of collision.

Of the eighty-nine (89) crashes, there were eight (8) reported with alcohol involvement which could be considered a contributing factor, but does not suggest needed countermeasures on the infrastructure, rather behavior countermeasures may be needed, which are beyond the scope of this project. Forty-four (44) of the drivers in the 89 crashes were reported as inattentive, ten (10) were distracted, and four (4) were both inattentive and distracted. While the driver's awareness can be considered a contributing factor, it does not suggest infrastructure countermeasures are needed.

Of the eighty-nine (89) crashes, forty-three (43) were reported as occurring when it was dark – not lighted, four (4) as dark – streetlights at intersections only, five (5) as dark- continuous streetlights, five (5) at Dawn/Dusk, and thirty-two (32) during daylight as shown in **Figure 11**. Since the majority of crashes appear to have occurred in the dark, countermeasures to enhance visibility during poor lighting conditions can be evaluated.

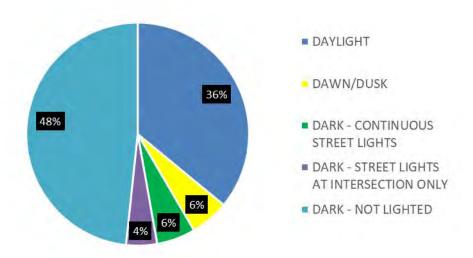
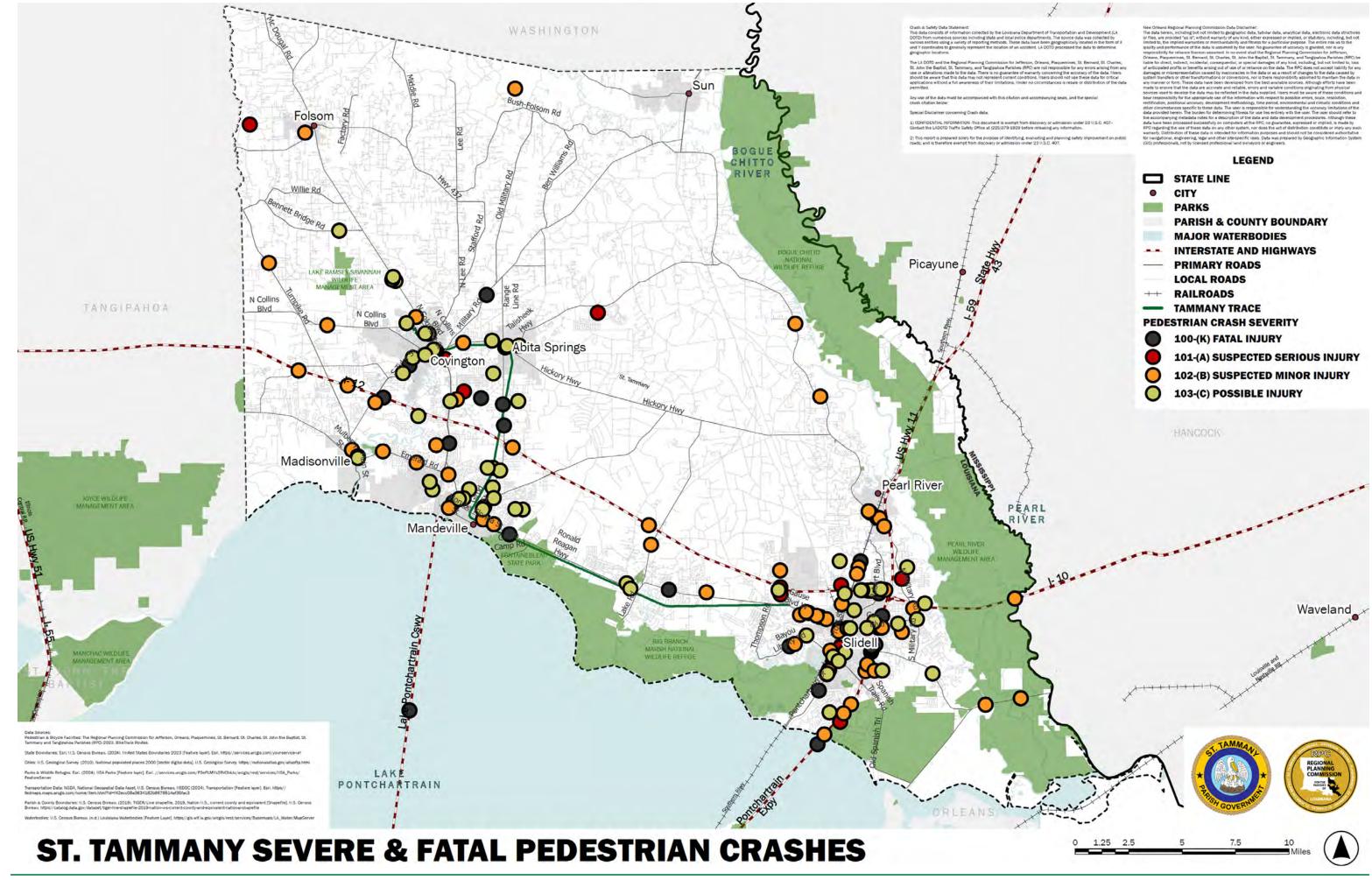
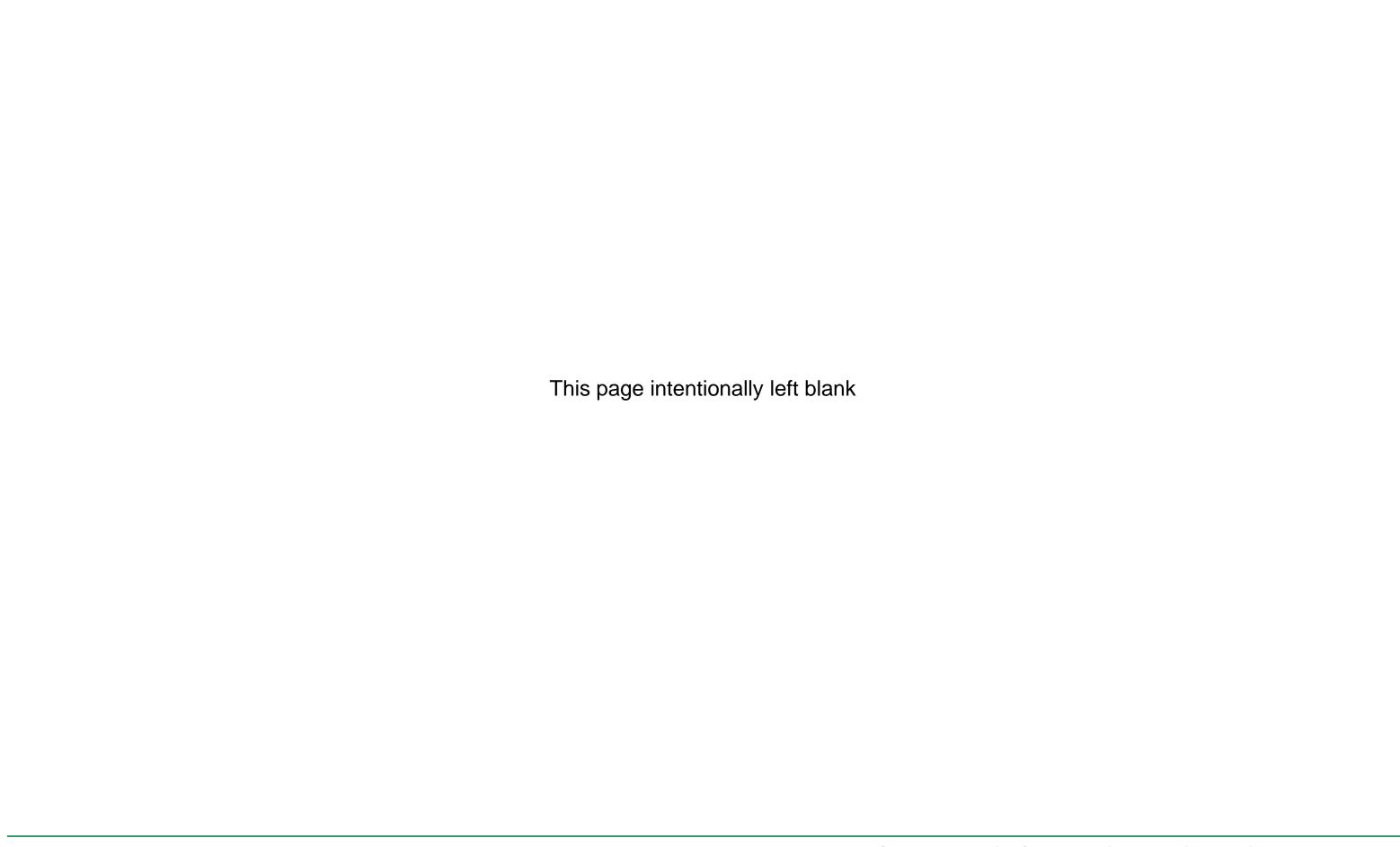


Figure 11: Pedestrian Lighting Conditions for Crashes, 2018-2022 (source: LA CART)

The Pedestrian Crash Map, showing the location of crashes as well as severity, is presented on the following page. No hot spots were identified within unincorporated St Tammany. Outside of the study area, the following hot spots were identified:

- In Slidell, six (6) pedestrian crashes, including two fatal, occurred on the Pontchartrain Dr corridor, between Old Spanish Trail and Eden Isles Dr.
- In Madisonville, two (2) pedestrian crashes resulting in suspected minor injury occurred on Water St, just north of Mulberry St. A third occurred on Mulberry St near Water St.
- In Covington, three (3) pedestrian crashes (two of which resulted in suspected serious injury) occurred on US 190 at N Columbia St or a block away at N Florida St.
- In Pearl River, four (4) pedestrian crashes occurred on Watts Rd (LA 41 / US 11) between Sullivan Dr and Nelson Rd involving minor or serious injury.





## **Crash Data Summary**

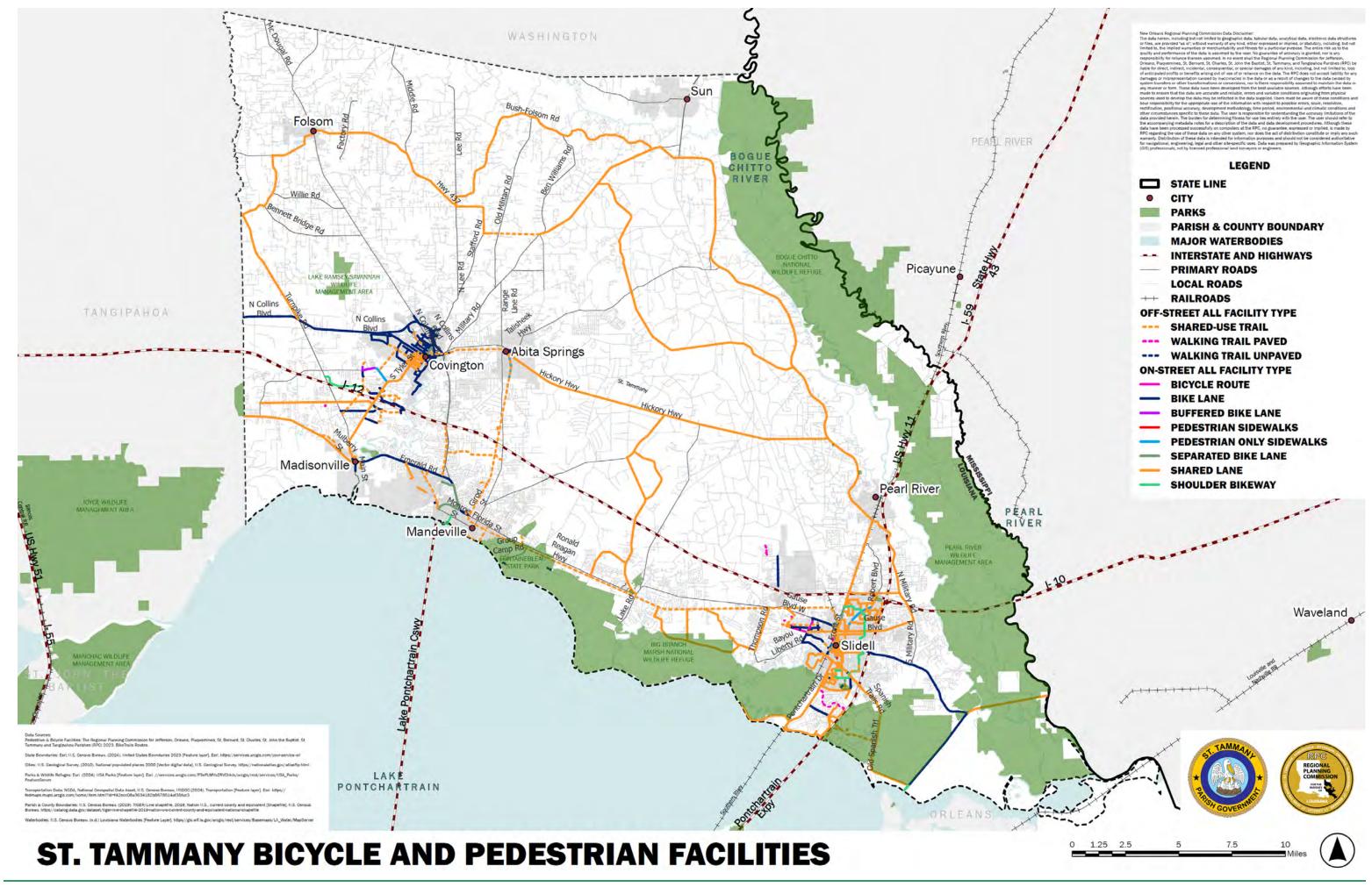
The five (5) years of crash history in St. Tammany Parish included one hundred-seven (107) crashes involving a bicycle and one hundred eighty-eight (188) involving a pedestrian; one (1) crash involved both. Nearly half (48% and 42%, respectively) of the fatal and injury bicycle and pedestrian crashes occurred on a parish road, suggesting further evaluation of the bicycle and pedestrian facilities on parish roads may be warranted to identify any contributing factors. Nearly half (48%) of the fatal and injury bicycle crashes were angle collisions which can be due to the unavailability of bicycle passages to use to avoid motorists. Most of the drivers (65%) were reported as inattentive. Signage and striping can be installed as a countermeasure to warn drivers to pay attention to bicyclists. The majority of crashes appear to have occurred in the dark; countermeasures to enhance visibility during poor lighting conditions can be evaluated. One hotspot was identified involving bicycle crashes within the study area, on US 190 between LA 434 and Davis Ave/Lake Rd. Additional hotspots were identified outside of the study area (within the jurisdiction of their respected municipalities).

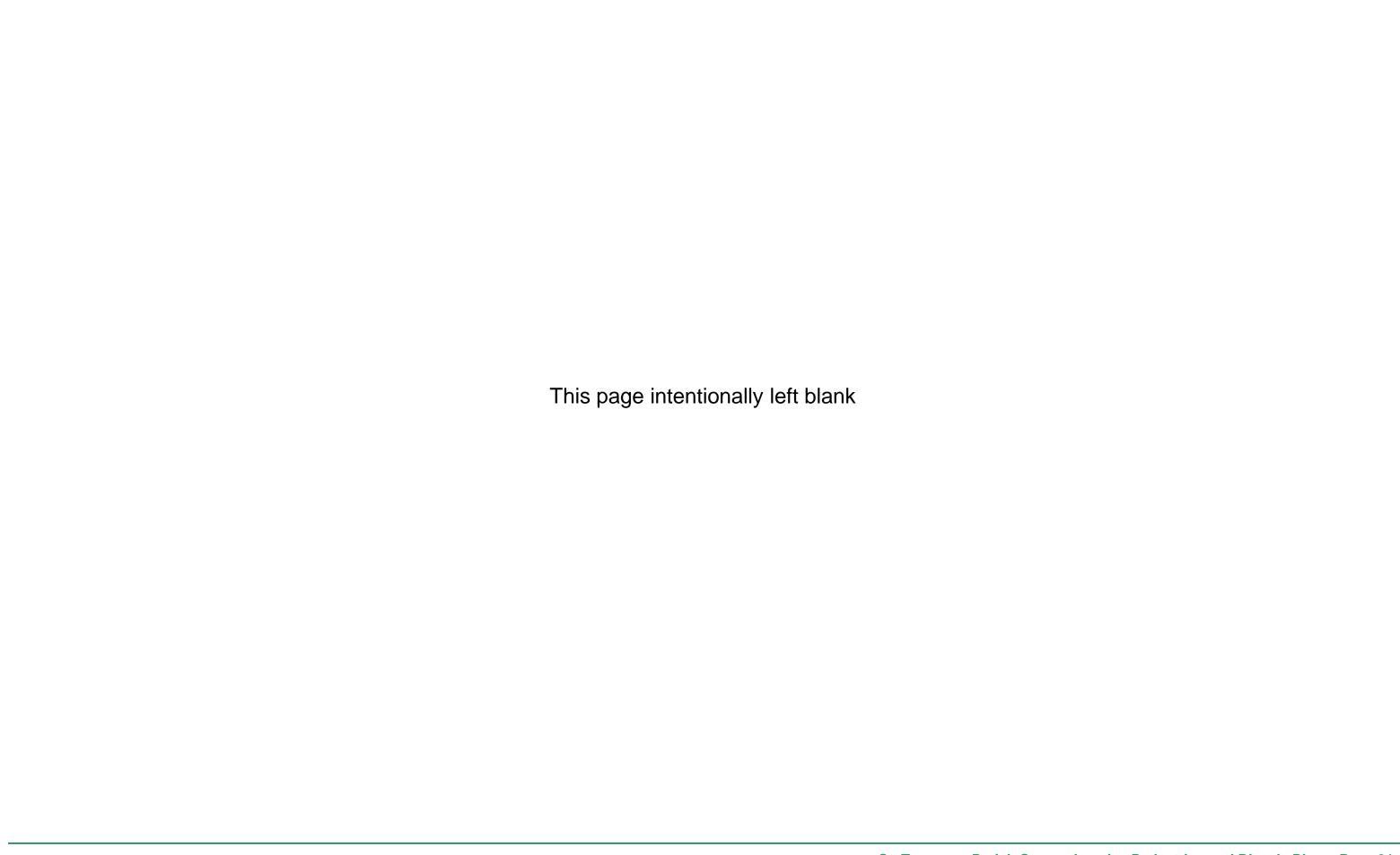
## EXISTING BICYCLE AND PEDESTRIAN FACILITIES WITHIN THE PARISH

The extent of existing bicycle and pedestrian facilities across St. Tammany Parish are shown on the Existing Bicycle and Pedestrian Facilities Map on the following page.

The map was developed from GIS data provided by St. Tammany Parish via the Regional Planning Commission. The map has different line indicators for off-street facilities (dashed lines) and on-street facilities (solid lines). There are different line indicators for the different categories of bicycle and pedestrian facilities. For off-street facilities, these include shared use trail (orange), walking trail paved (red) and walking trail unpaved (dark blue). For on-street facilities, these include bicycle route (magenta), bicycle lane (dark blue), buffered bike lane (violet), pedestrian sidewalks (red), pedestrian-only sidewalks (light blue), separated bike lane (green), shared lane (orange), and shoulder bikeway (lime green). The map does not generally include pedestrian sidewalks in older urban areas (which are outside of the project study area as they are within municipalities) nor does it include sidewalks on interior streets in those newer subdivisions within the unincorporated portions of the Parish, as no GIS data is available.

At the present time, there is only 1 mile of completed on-street pedestrian facilities and 7 miles of completed off-street pedestrian facilities in the Parish. There are only 9 miles of completed on-street bicycle facilities, and 46 miles of off-street facilities. Most of those 46 miles are made up by the roughly 32 mile long Tammany Trace, which as a shared use trail also serves as a pedestrian facility.





## **Observations on Bicycle Facilities**

As can be seen from the map, other than the Tammany Trace, most off-street bicycle facilities are located near urbanized areas and city centers, such as the west side of Covington, the areas near the interchange of I-12 and LA 21, within and north of Mandeville, and on the west side of Slidell.

Bicycle lanes, separated bicycle lanes, and buffered bicycle lanes are found within and between Mandeville, Madisonville, and Covington, with Covington having a well developed system of bicycle lanes within its city limits. On-street bicycle lanes are also located around Slidell.

Shared lanes are more prevalent in the Parish. Both Slidell and Covington have networks of urban shared lanes within their city limits, but shared lanes can be found all across the Parish, mostly on rural state highways and rural roads.

Still, facilities for bicycling in the Parish are rather limited. US highways, state highways and Parish roadways in the Parish typically do not have on-street bike lanes. Adequately wide paved shoulders on highways suitable for use as a bicycling route are present in some areas of the Parish but are generally located in the more rural areas. Highways and roadways in urbanized areas tend to have neither delineated bicycle facilities nor paved shoulders.



LA 59 south of I-12: no bicycle facilities, no paved shoulders

Source: Google Maps Street View, April 2023



Sharp Road (Parish Roadway): no bike facilities, no paved shoulders Source: Google Maps Street View, April 2023

## **Observations on Pedestrian Facilities**

As can be seen from the map, other than the Tammany Trace, there are very few off-street pedestrian facilities. These include paved and unpaved walking trails located near the City of Slidell.

There are on-street pedestrian facilities (generally sidewalks), within and in the near vicinity of Slidell, Abita Springs, and Mandeville, as well as the area between Covington and Madisonville.

In general, pedestrian facilities in St. Tammany Parish are very limited. Most are in the form of sidewalks within the older town centers of the Parish's municipalities (Mandeville, Slidell, Covington, and Madisonville), which are not included in the project study area.



Sidewalks in Old Mandeville (top) and downtown Covington (bottom)

Source: Google Maps Street View, April 2023

Most of the US highways, state highways and Parish roads lack sidewalks, as do the overwhelming majority of internal residential subdivision streets:



US Highway 190 between Mandeville and Covington

Source: Google Maps Street View, April 2023



Typical St. Tammany subdivision street with no sidewalks

Source: Google Maps Street View, April 2023

# Current Standards and Policies for Bicycle and Pedestrian Facilities

## State

At the state level, in 2010 the LADOTD enacted a *Complete Streets Policy*. In short, the policy addressed the needs of pedestrians and bicyclists and called for the LADOTD to consider and include (where appropriate) sidewalks and bicycle accommodations along new and reconstruction roadway projects. The was updated and revised in 2016 to reference LADOTD's new *Complete Streets Design Guide*, and to revise language to allow more flexibility in policy implementation and local government coordination. The revision also clarified several aspects of the complete streets policy. Key points included:

Maintenance for sidewalks and bicycle facilities outside the limits of the curb, shoulder
or barrier will be the responsibility of the local jurisdiction. Maintenance agreements
will be required as a provision of the entire project.

- On all new and reconstruction roadway projects that serve adjacent areas with existing
  or reasonably foreseeable future development or transit service, DOTD should plan,
  fund, and design sidewalks and other pedestrian facilities. The appropriate facility type
  will be determined by the context of the roadway with local government involvement.
- On all new and reconstruction roadway projects, DOTD should provide *bicycle accommodations* appropriate to the context of the roadway. The provision of a paved shoulder of sufficient width, bicycle lane, a shared use path, or a marked shared lane may also suffice, depending on context with local government involvement.

Along with the revised policy, the State issued new Engineering Directives and Standards (EDSM) to be used in implementing complete streets, as well as LADOTD's most recent Minimum Design Guidelines. Key standards in the minimum design guidelines for state highways include:

- Raised objects shall not be used to separate bicycle lanes from adjacent travel lanes.
- Bike lanes shall be placed in both directions.
- Required paved shoulder width can be reduced by the width of bike lane.
- Required paved shoulder width can be reduced by the width of cycle track.
- Side paths, one-way bike facilities and two way pedestrian facilities must be on both sides of the road. A two way bike facility is acceptable if all of the following is true:
  - most suitable on side path analysis chart;
  - path is less than ½ mile;
  - path connects two other good, high-quality trail sections that otherwise could not be connected.

The table below was recreated from the *Minimum Design Guidelines*, and contains dimension standards for complete streets facilities along LADOTD Highways:

Element	Urban							Rural								
	Freeway/		N/A					N/A								
	Expressway															
Complete Streets Widths and Offsets (in ft.)		Sidewalk			Side Path		C	Cycle		Sidewalk			Cycle Track			
							Track Width						(One	(One Way		
													Only)			
	All Other Classifications	Offset of Sidewalk From Travel Lane	Usable Width	Width Adjacent to Curb	Usable Width	Path	Usable Width	Offset	Bicycle Lane Width	Usable	Offset of Sidewalk From Travel Lane	Side Path	Usable Width	Offset of Cycle Track From Travel Lane	Bicycle Lane Width	
	Preferred	<u>&gt;</u> 8	5	7	10	5 ft. Landscape	5	5 ft. striped	5	5	Clear Zone	N/A	5	5 ft. striped	5	
	Acceptable	2				Buffer		buffer			8			buffer		

## **Parish**

At the Parish level, online research and discussion with St. Tammany Parish staff revealed that there are no adopted design standards for pedestrian facilities in unincorporated St. Tammany Parish. Sidewalks are currently not required for any type of development along a surface street or within a new residential subdivision, however the Parish has recently adopted an incentive program for sidewalk inclusion in new residential subdivisions:

# **Incentives for Major Subdivisions**

Sidewalk	10 percent decrease in minimum lot width or	Maximum 10 percent credit					
Construction	are when sidewalks are provided throughout or	<ul> <li>50 percent of the subdivision includes all internal</li> </ul>					
	at least 50 percent of the subdivision	access roads having sidewalks on one side					
		constructed in accordance with the requirements					
		of this UDC.					

Source: Code of Ordinances, Part II UDC, Ch. 600 General Development Standards

According to St. Tammany Parish Department of Planning and Development staff, this incentive program has been very successful, and nearly all new residential subdivisions are now being built with sidewalks.

There are no Parish ordinances that create design standards specifically related to bicycle facilities.

## Local

The City of Covington adopted a *Complete Streets Policy* in 2018. The policy applies to all new roadway construction projects and drainage projects along roadways, and includes criteria to be considered for determining if streets are suitable for complete streets implementation.

The City of Madisonville adopted a Complete Streets Policy similar to that of Covington in 2019.